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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,867	04/06/2006	Stefan Hein	APP10 P-307	5083

7590 02/24/2009  
Marcus P Dolce  
Price Heneveld Cooper De Witt & Litton  
695 Kenmoor SE  
Post Office Box 2567  
Grand Rapids, MI 49501

EXAMINER
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BASKIN, JEREMY S

ART UNIT	PAPER NUMBER
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3753

MAIL DATE	DELIVERY MODE
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02/24/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<i>Office Action Summary</i>	Application No.	Applicant(s)	
	10/574,867	HEIN, STEFAN	
	Examiner	Art Unit	
	Jeremy S. Baskin	3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2008.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 14-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/06/2006</u>  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Objections*

1. Claim 21, Claims 20, 23, 24, and Claims 19, 22, 26, 33 are objected to under 37 CFR 1.75 as being substantial duplicates of Claims 16-17, respectively. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 14, 31, and 32 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. In Claim 14, the term "the body" in line 8 and the term "edges" in line 10 both lack antecedent basis.

5. In Claim 31, line 14, the term "the body" lacks antecedent basis.

6. In Claim 32, line 3, the term "the additional chamber" lacks antecedent basis.

7. Claims 14-32 are rejected under 35 U.S.C. 112, second paragraph, as being dependent on claims that fail to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

*Claim Rejections - 35 USC § 102*

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 14-24 and 26-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Dupuis (US Pat. No. 3,351,348).

10. In regard to Claim 14, Dupuis teaches a housing 20 having an opening 11 that is to be traversed by a flexible band substrate 38. A movable sealing body 30 cooperates with a sealing surface 12-15. In order to close the opening, the movable sealing body clamps down on the edge 15 of sealing surface with the flexible band substrate in between (Figure 2). The sealing surface defines the rectangular opening in a frame-like fashion.

11. In regard to Claim 15, the band substrate is forced through the movable sealing body against a sealing edge 15. A tangent of the movable sealing body forms an obtuse angle with longitudinal direction of the substrate (Figure 2).

12. In regard to Claims 16 and 21, the movable sealing body has an arcuate contour (32 in Figure 2) and possesses a larger radius than that of the arcuate contour of the sealing surface (col. 3, lines 3-6).

13. In regard to Claims 17, 20, 23, and 24, the movable sealing body is provided with an elastically flexible surface material 35.

14. In regard to Claims 18, 19, 22, 26, and 33, the movable sealing body comprises a cylindrical roll 32.

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15. In regard to Claim 27, the movable sealing body 30 is rotably mounted via shaft 34.
16. In regard to Claim 28, the movable sealing body is moved between an inactive and a closed position by a power drive (24, drive mechanism, col. 3, lines 43-45).
17. In regard to Claim 29, the power drive is located at the housing via 25 in Figure 1.
18. In regard to Claim 30, the movable sealing body is firmly tightened against the sealing surface at a desired level of force by the accumulation of pressure within chamber 17 (col. 3, lines 50-55).
19. In regard to Claim 31, Dupuis teaches a processing plant (Figure 1) with at least one evacuable chamber 5, a chamber for winding up or unrolling the substrate (area possessed by rollers 40), and an opening 11 connecting the two chambers for the substrate to guide through. An air lock valve 17 is provided at the opening. The air lock valve possesses a housing 20 and one movable sealing body 30 that clamps onto a sealing surface 12-15 with the substrate 38 in between. The sealing surface defines the rectangular opening in a frame-like fashion.
20. The movable sealing body 30 and the sealing surface 12-15 can be turned to any chamber to be ventilated as desired.

*Claim Rejections - 35 USC § 103*

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dupuis in view of Seminski (US Pat. No. 3,807,058).

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23. Dupuis fails to teach that the sealing surface comprises a planar, flexible material with a wall section in a frame-like fashion in an area surrounding the border of the opening.

24. Seminki discloses a sealing arrangement for an enclosed chamber. Seminski teaches a sealing surface 3 possessing a wall section 8 that forms a frame-like section in an area surrounding the opening. The seal is tightly connected to the body 2 so as to allow the device to perform its intended function. Seminski teaches that it is known in the art to create the seal out of a flexible material (col. 1, lines 43-45).

25. At the time of the invention, it would have been obvious to one of ordinary skill in the art to incorporate a flexible seal that forms a frame-like section around the opening in a band processing lock valve, as taught by Seminski, so as to provide a wiping action on at least one surface of the band substrate to clean it as it enters or exits the system.

#### *Conclusion*

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Baer et al. (US Pat. No. 2,952,569) discloses a lock valve with a seal that forms a frame-like cross section around a band substrate. Morrison (US Pat. No. 3,090,134) discloses a lock valve with flexible seals and rollers that form a frame-like cross section around a substrate. Yapel et al. (US Pat. No. 6,576,296) discloses a movable roller for flexible substrate processing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy S. Baskin whose telephone number is (571) 270-7421. The examiner can normally be reached on Monday through Friday, 7:30AM to 5:00PM ET.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen M. Hepperle/  
Primary Examiner, Art Unit 3753

/J. S. B./  
Examiner, Art Unit 3753